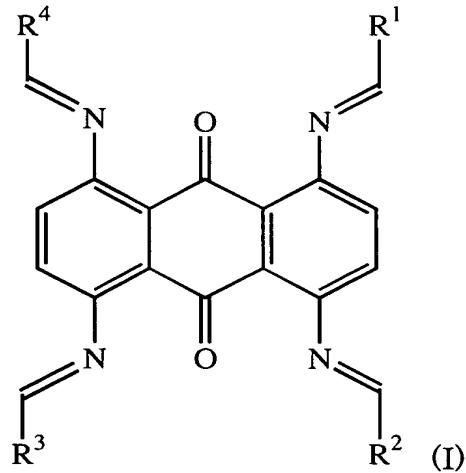


Claims

1. A method for invisibly marking a liquid petroleum hydrocarbon; said method comprising adding to said liquid petroleum hydrocarbon at least one
 5 dye having formula (I)



wherein R¹, R², R³ and R⁴ independently are aryl or aromatic heterocyclic; and
 10 wherein said at least one dye has an absorption maximum in the range from 710 nm to 900 nm.

2. The method of claim 1 in which the liquid petroleum hydrocarbon is selected from the group consisting of lubricating oil, hydraulic fluid, brake fluid, gasoline, diesel fuel, kerosene, jet fuel and heating oil.
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3. The method of claim 1 in which R¹, R², R³ and R⁴ are the same aryl or aromatic heterocyclic group.

20 4. The method of claim 3 in which R¹, R², R³ and R⁴ are phenyl or substituted phenyl.

5. The method of claim 1 in which each dye is present in an amount from 0.01 ppm to 5 ppm.

6. The method of claim 5 in which said dye having formula (I) has an absorption maximum in the range from 750 nm to 900 nm.

5 7. The method of claim 6 further comprising at least one visible dye in an amount from 0.1 ppm to 2 ppm.

8. The method of claim 7 in which each dye having formula (I) is present in an amount from 0.01 ppm to 2 ppm, and each visible dye is present in 10 an amount from 0.2 ppm to 2 ppm.

9. The method of claim 8 in which R¹, R², R³ and R⁴ are phenyl or substituted phenyl.

15 10. The method of claim 9 in which the liquid petroleum hydrocarbon is selected from the group consisting of lubricating oil, hydraulic fluid, brake fluid, gasoline, diesel fuel, kerosene, jet fuel and heating oil.